

ABSTRACT

A disk mounting hub has a disk-mounting face formed at one end as a truncated conical surface of revolution symmetric about a central axis. A cylindrical inner hub member is coaxial with the hub body outside diameter and the surrounding mounting face. The inner hub member is adapted to receive a planar disk with a central opening. The mounting face is disposed at a hub face angle $(\pi/2 \pm \Omega)$ relative to the central axis. Hub face angle Ω is selected so that a disk clamping force F applied to an inner disk portion surrounding the opening bends a portion of the disk interior to the hub inside diameter to conform with the conical disk-mounting face. This interior bending portion reduces or eliminates the tendency of the outer disk portion to form an excessive coning angle Φ .